



Recommended curriculum guidelines for family medicine residents

Integrative medicine

This document was endorsed by the American Academy of Family Physicians (AAFP).

INTRODUCTION

Each family medicine residency program is responsible for its own curriculum. The AAFP Commission on Education's Subcommittee on Graduate Curriculum has created this guide as an outline for curriculum development, and it should be tailored to the needs of the program.

Through a series of structured and/or longitudinal experiences, the curricula below will support the overall achievement of the core educational competencies defined by the Accreditation Council for Graduate Medical Education (ACGME) and provide guideposts to program requirements specific to family medicine. For updates and details, please refer to the ACGME website at www.acgme.org. Current AAFP curriculum guidelines may be found online at aafp.org/cg. These guidelines are periodically updated and endorsed by the AAFP and, in many instances, other specialty societies, as indicated on each guideline.

PREAMBLE

Family physicians provide comprehensive, continuous and coordinated care for patients from a wide variety of backgrounds and needs and strive to keep patients as the drivers of their own care. Nearly half of Americans use nonbiomedical approaches to health care and wellness, and many do so without the knowledge of or input from their doctors. Integrative medicine is a comprehensive approach to health care that seeks to bring together the best evidence and practices from allopathic and osteopathic medicine with whole systems,

complementary modalities and nonbiomedical approaches in a coordinated way. By educating family physicians in the options available to and used by patients, they can better work with patients to support them in making informed decisions and to explore options that might not have been otherwise considered.

As defined by the organization, Integrative Medicine for the Underserved (IM4US), integrative medicine “focuses on the whole person—body, mind, and spirit; affirms the importance of connection and relationship with self, family, community and environment, as well as with the practitioner; is informed by knowledge from various sources; and makes culturally respectful use of various therapeutic and lifestyle approaches, practitioners, disciplines and traditions, especially those meaningful to the patient, to achieve optimal health and healing.”

An integrative medicine approach encompasses careful consideration of multiple determinants of health, including a patient’s nutrition, physical activity, sleep, relationships, environmental exposures, threats, stress, mind-body connection, spirituality and socioeconomic status. It also respects that patients have their own health beliefs and cultural practices. This model emphasizes equipping patients with the tools, knowledge and support necessary for effective self-management, behavioral change and sustained healthy lifestyles. Thus, it is aligned with the core tenets of family medicine by embracing a patient-centered model and care for underserved populations, such as those served by many residency programs.

Exposure to integrative medicine within a family medicine residency offers the opportunity to improve patient outcomes, increase the accessibility of integrative approaches regardless of economic circumstances, and enhance physician and patient satisfaction, as well as strengthen physician-patient relationships. Training physicians in integrative medicine can also improve the well-being of physicians in training.

Definitions

Whole medical systems: Whole medical systems (WMS) describe comprehensive approaches to optimal health and well-being that have developed independently or alongside allopathic medicine. Often, these systems encompass knowledge, skills and practices based on the theories, beliefs, experiences and social constructs indigenous to a specific culture. WMS commonly referenced in integrative medicine include osteopathic medicine, traditional Chinese medicine (TCM), Ayurveda, acupuncture, indigenous medical systems, naturopathic medicine and homeopathic medicine.

Complementary modalities: Complementary modalities are practices utilized in conjunction with allopathic medicine to optimize personal health and healing. Many have originated from indigenous and ancestral traditions, such as manual therapies, biofield therapies, acupuncture, movement therapies and expressive arts.

Nonbiomedical approaches: Nonbiomedical approaches incorporate a broader understanding of what creates health and illness, recognizing the complex relationships

among self, community, environment, social and spiritual factors beyond the potentially reductive biological and psychological processes of allopathic medicine.

PATIENT CARE

At the completion of residency training, a family medicine resident should be able to:

1. Demonstrate competency in patient-centered, relationship-based care by conducting a comprehensive integrative medicine assessment that includes:
 - a. Utilizing a biopsychosocial-spiritual model to guide history taking by:
 - i. Identifying and exploring the patient's health concerns, goals, expectations and values
 - ii. Assessing psychosocial, spiritual, cultural, socioeconomic and environmental influences on health, including emotional well-being, social support systems, personal relationships and cultural values
 - iii. Including a detailed assessment of lifestyle factors (nutrition, sleep, movement, stress, connection and environmental health)
 - iv. Applying the principles of trauma-informed care to maintain an environment of care that promotes safety and collaboration with the patient
 - v. Eliciting a thorough integrative medicine history, including prior and current use of both biomedical, nonbiomedical and complementary therapies (e.g., dietary supplements, mind-body practices) and evaluating patient responses and openness to these modalities
 - b. Conducting a comprehensive physical exam and biomedical evaluation while also addressing nonbiomedical domains essential to whole-person care
2. Apply evidence-based integrative medicine approaches to patient care by:
 - a. Formulating differential diagnoses and selecting diagnostic evaluations using allopathic and integrative guidelines
 - b. Using communication techniques, such as motivational interviewing and appreciative inquiry, to facilitate meaningful health behavior changes and support patient empowerment
 - c. Articulating the role of integrative medicine across prevention levels (primary, secondary, tertiary) to support individual and population health by:
 - i. Counseling patients on the risks, benefits, evidence, alternatives and financial considerations of integrative treatment options to support informed decision-making
 - ii. Incorporating principles of and knowledge in integrative medicine into the facilitation of effort for self-management of chronic conditions of patients
3. Demonstrate the ability to collaborate with patients to develop an integrative medicine therapeutic plan that blends biomedical and nonbiomedical approaches and lifestyle modifications by:
 - a. Developing treatment plans which:

- i. Integrate nonpharmacological therapies, botanical medicine and supplements for common clinical concerns (e.g., pain, infections, gastrointestinal issues, metabolic syndrome)
 - ii. Counsel and refer patients for appropriate mind-body therapies (e.g., cognitive behavioral therapy, mindfulness, mindfulness-based stress reduction (MBSR), yoga, Tai Chi, Qigong)
 - iii. Educate patients on the role of lifestyle factors for optimizing health and wellness
 - iv. Counsel on other whole system approaches and provide referrals to qualified and competent providers/practitioners
4. Utilize multidisciplinary resources, including:
- a. Working with integrative medicine modalities and approaches to assist patients with undifferentiated illness, recognizing that suffering can be relieved and healing can be enhanced even when a cure or a concrete diagnosis is not possible
 - b. Coordinating care plans from specialists in biomedical and nonbiomedical fields

MEDICAL KNOWLEDGE

At the completion of residency training, a family medicine resident should be able to demonstrate:

1. Medical knowledge of sufficient breadth and depth to practice integrative medicine by understanding:
 - a. Definitions and principles of biomedical, nonbiomedical, WMS, complementary modalities, and integrative medicine and historical terminology of complementary and alternative medicine (CAM)
 - b. Overlap between integrative medicine and family medicine in philosophy with patient-centered and relationship-based care
 - c. Evidence for core domains, as defined by the American Board of Integrative Medicine:
 - i. WMS, such as osteopathy, traditional Chinese medicine, Ayurveda, acupuncture, indigenous medical systems, naturopathy and homeopathy: basic concepts, evidence for common uses and safety
 - ii. Botanical medicine: basic pharmacology, evidence for common herbs, drug-herb interactions and product regulation
 - iii. Manual therapies: musculoskeletal and myofascial treatments, such as chiropractic, osteopathic manual therapy (OMT), massage therapy and physical therapy
 - iv. Mind-body therapies: an understanding of stress physiology and how to effectively leverage the mind-body connection with therapies, such as mindfulness, guided imagery, relaxation techniques, yoga, Tai Chi, Qigong and placebo/nocebo effect
 - v. Nutrition: therapeutic, preventive, and elimination diets, phytonutrients, gut microbiome, micro- and macro-nutrients, and supplements

- vi. Biofield therapies: acupuncture, Reiki and therapeutic touch
- 2. Critical thinking and decision-making by knowing:
 - a. How to evaluate evidence for integrative medicine modalities and stratification by strength of evidence
 - b. Which integrative medicine modalities are indicated for common medical conditions and undifferentiated illnesses and how their use compares with biomedical approaches
 - c. How to use the full scope of knowledge, skills and abilities of professionals from health and other fields to provide care that is safe, timely, efficient, effective and equitable
 - d. Research interpretation challenges in integrative medicine, including population diversity in study design, biases in publication, research funding and regulation
 - e. Safety concerns, including drug-herb and drug-supplement interactions, unregulated products, and potential risks, adverse effects, and contraindications of integrative medicine modalities

INTERPERSONAL COMMUNICATION

At the completion of residency training, a family medicine resident should be able to:

1. Practice patient-centered and relationship-based care by:
 - a. Recognizing the value of relationship-centered care as a tool to facilitate healing
 - b. Demonstrating active listening skills with patients and their families
 - c. Developing a trusting relationship with patients, families and other team members within and outside the medical setting
2. Collaborate with individuals and families to develop personalized plans of care to promote health and well-being that incorporate integrative approaches, including lifestyle counseling and the use of mind-body therapies by:
 - a. Facilitating open and responsive dialogue with patients and/or families about integrative medicine principles and care plans
 - b. Embracing the cultural diversity and individual differences that inform patients' interpretations of health, disease, and illness and underlie patients' preferences for treatment plans within integrative medicine and family medicine
 - c. Communicating the roles and responsibilities of all members of the team for a patient's care clearly to patients, families, community members and other professionals
3. Collaborate respectfully and effectively with peers, staff, consultants and nonbiomedical practitioners and healers who share in the care of patients by:
 - a. Optimizing interprofessional collaboration
 - b. Knowing what professions, such as acupuncture, naturopathy and massage therapy are licensed in one's state
 - c. Being able to find information on training for nonbiomedical healing modalities and help patients evaluate potential practitioners
 - d. Having a basic understanding of the scope of care of these modalities

- e. Respecting the unique cultures, values, roles, responsibilities and expertise of other health professions
- f. Choosing effective communication tools and techniques, including information systems and communication technologies, to facilitate HIPAA-compliant discussions and interactions that enhance team function
- 4. Apply the principles of the trauma-informed care approach to practice by:
 - a. Maintaining an environment of care that promotes patient safety
 - b. Addressing the intersections of trauma with culture, history, race, gender, location and language, while acknowledging the compounding impact of structural inequity and its impact on health
 - c. Being responsive to the unique needs of complex patients
- 5. Promoting patient resilience and empowerment
 - a. Assist patients and others involved in their care in locating reputable medical information on the internet and other sources
 - b. Discuss internet safety and protection of health information

SYSTEMS-BASED PRACTICE

At the completion of residency training, a family medicine resident should be able to:

- 1. Enhance patient safety and quality improvement processes by:
 - a. Understanding how to coordinate biomedical and nonbiomedical care within the health care system, achieving this through working in interprofessional teams that include integrative medicine practitioners and nonbiomedical healers to enhance patient safety and improve the quality of patient care to make it timely, efficient, effective and equitable
 - b. Understanding how to use complementary therapies to expand treatment options and improve patient and clinician satisfaction and outcomes
 - c. Understanding the standards, training, credentialing, expertise, knowledge and skills of a multidisciplinary team that uses integrative medicine approaches
 - d. Communicating clear roles and responsibilities of an interdisciplinary health care team, which includes biomedical and nonbiomedical team members
 - e. Understanding process improvement as related to clinical care and programming within integrative medicine care
 - f. Identifying risks uniquely related to integrative medicine, such as herb-drug interactions and unregulated supplements
 - g. Understanding how to collaborate with nonbiomedical community clinicians, taking into consideration legal implications and documentation issues
- 2. Assist patients with health care system navigation for patient-centered integrative medicine care by:
 - a. Understanding how different payment models and patients' financial resources impact patient access to nonbiomedical interventions
 - b. Facilitating access to integrative medicine services for all patients, including underserved populations

- c. Analyzing the cost-benefit ratio of nonbiomedical therapies and incorporating considerations of resource utilization into treatment planning
- 3. Appreciate the physician's role in health care systems by:
 - a. Understanding how integrative medicine plays a role in improving the quality of health care and population health
 - b. Describing the factors that contribute to a healing environment for patients and the health care team
 - c. Striving to enhance the healing environment within the health care setting
- 4. Advocate for patients by:
 - a. Providing effective patient education in integrative medicine that considers the patient's needs, beliefs, cultural background and health literacy
 - b. Promoting equitable access to safe and appropriate nonbiomedical therapies
 - c. Understanding public health implications of integrative medicine, recognizing the role of nonbiomedical approaches in community health and advocating for policies that support its inclusion in the health care system

PRACTICE-BASED LEARNING

At the completion of residency training, a family medicine resident should be able to apply:

1. Evidence-based and informed practice by demonstrating the ability to locate, access and evaluate integrative medicine evidence through:
 - a. Identifying reliable resources on biomedical, nonbiomedical and complementary approaches to health care
 - b. Identifying community values of practice populations and eliciting patient preferences to guide patient care
 - c. Critically appraising integrative medicine research by:
 - i. Identifying weaknesses and limitations in study design and its impact on study outcomes
 - ii. Being aware of how inadequate study design can create preventable differences in health care access and utilization for varying population groups
 - iii. Discussing issues in integrative medicine practice research, including but not limited to those relative to evaluating whole practices, whole systems, patient-centered approaches and health outcomes
 - iv. Determining the applicability of research findings to a particular patient and tailoring personalized health plans in partnership with the patient
 - a. Pursuing community engagement and scholarly work within integrative medicine by:
 - i. Collaboratively developing and/or participating in multidisciplinary practice-based research
 - ii. Incorporating community-based participatory research to identify and address preventable differences in health care access and utilization to optimize health for all populations
2. Reflective practice and commitment to personal growth, demonstrating:

- a. Lifelong learning through self-assessment and commitment to personal growth by:
 - i. Assessing strengths, gaps in knowledge, skills, habits and performance in clinical care through self-reflection, audits and benchmarking against evidence or peers
 - ii. Working to effect change in personal practice and the larger health system
- b. Development of individual learning plan (ILP) goals using reflection and feedback to set targeted learning goals and improve or maintain well-being as a physician
- c. Continuously improving patient care based on engaging in integrative medicine life-long learning

PROFESSIONALISM

At the completion of residency training, a family medicine resident should be able to:

1. Demonstrate patient-centered care, professional behavior and personal accountability in integrative medicine by:
 - a. Reflecting on the role of personal biases and values in developing patient care plans
 - b. Assessing the impact of one's personal and professional life experiences, including but not limited to grief, trauma and one's journey to and through medicine in providing patient care
 - c. Incorporating into treatment plans patients' interpretations of health, disease and illness based on culture, beliefs and values
 - d. Addressing system-level factors that impede a patient-centered care model
 - e. Assessing personal and team gaps in knowledge and skills related to integrative medicine and practicing within one's scope of practice
 - f. Providing access to all effective treatment modalities by collaborating with expert colleagues in the field of integrative medicine
 - g. Understanding the importance of self-care practices to improve personal health, maintain work-life equilibrium and serve as a role model for patients, staff and colleagues
 - h. Engaging in continuous professional and interprofessional development
 - i. Demonstrate awareness of implicit bias, particularly in relation to race and ethnicity

IMPLEMENTATION

To successfully implement integrative medicine curriculum guidelines, several key resources and strategies should be considered:

1. Recommended resources

Identifying a faculty champion is very helpful. Ideally, the leader would have formal training

in integrative medicine or a strong interest in learning evidence-based integrative medicine approaches. The champion should utilize available resources to develop curriculum, didactics and workshops on integrative medicine topics. Other faculty members should be encouraged to incorporate integrative medicine concepts into their existing lectures, such as incorporating nutrition approaches into a hypertension didactic and during precepting. Community resources are also needed to provide exposure to multiple biomedical and nonbiomedical modalities. Ideally, practitioners of various integrative medicine modalities would be physically accessible for resident interaction. However, virtual connections to practitioners trained in modalities not typically covered in medical school can offer unique insights into these approaches. There are multiple databases available to find reliable information on herbs and other modalities, most of which are routinely part of a university or institutional library. (See Resources section below.)

2. Time course

The curriculum should be longitudinal, beginning in the intern year or early second year with a foundational philosophy of whole-person care. Simple mind-body techniques should be introduced early so that residents can quickly incorporate them into practice and personal well-being plans. The overall goals of the curriculum are to ensure that each resident graduates with a basic understanding of the philosophy of integrative medicine, knowledge of approaches to patient needs and the ability to apply them clinically, as well as when and how to advise patients of their clinical application. When possible, these can be used within a family medicine office visit. Being able to discuss multiple approaches allows the resident to partner with patients to find solutions that align with their culture, worldview, values and life circumstances, empowering them to care for their own well-being.

3. Content options

When developing content, consider using existing online curricula and collaborating with programs that already embed an integrative medicine curriculum in their program. A structured three-year schedule of didactics, workshops and outside experiences will allow time to explore specific modalities and their application to commonly seen problems in family medicine. Interested residents can be encouraged to create content to share with peers and faculty, especially after pursuing additional training in an area of interest, thereby fostering a dynamic and evolving curriculum. Programs that simultaneously educate faculty in integrative medicine knowledge and approaches are more successful in creating curricula and cultures where integrative medicine may take root.

RESOURCES

Academic Consortium for Integrative Medicine & Health.
<https://imconsortium.org/page/partner-resources>

Andrew Weil Center for Integrative Medicine.
https://awcim.arizona.edu/public_site_2024/home.html

Georgetown University Integrative Medicine Resource Guide.
<https://guides.dml.georgetown.edu/integrativemedicine>

Integrative Medicine for the Underserved (IM4US). <https://im4us.org/>

National Center for Complementary and Integrative Health (NCCIH). www.nccih.nih.gov

Osher Center for Integrative Health at University of Wisconsin–Madison.
www.fammed.wisc.edu/integrative/

Osher Center for Integrative Medicine. Center Without Walls.
https://oshercenter.org/about/our-center/#center_without_walls

Rakel D. *Integrative Medicine*. 5th ed. Elsevier; 2022.
www.helmpublishing.com/products/integrative-medicine-5th-ed?variant=41752818876621

U.S. Department of Veterans Affairs Whole Health Library. www.va.gov/wholehealthlibrary/

PAID RESOURCES

ConsumerLab.com. www.consumerlab.com/

Natural Medicines Therapeutic Research Collaboration (NatMed Pro).
<https://naturalmedicines.therapeuticresearch.com/Home/ND>

REVISIONS

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